Going Overboard!

Information for Owners and Operators of Overboard Discharge Systems

A newsletter of the Maine Department of Environmental Protection

Volume II, Issue I — February, 1999

Second Issue of Newsletter

Well, it has been a lot longer between issues of the overboard discharge newsletter than we had hoped, but here it is. Many thanks to those of you who suggested names for the newsletter. We had a number of great suggestions.

Going Overboard! is an informal newsletter, produced by the DEP to provide you with accurate, timely and helpful information about overboard discharges (OBDs), the care and maintenance of your overboard discharge system, changes in laws and regulations that may affect you, and any other information that may be helpful to you.

What is an OBD? By Pam Parker

Overboard discharges are DEP-approved, treated discharges of sanitary waste water from residential, commercial, and some publicly-owned facilities. An overboard discharge is **not** a municipal treatment plant, an industrial discharge (like a paper mill), a discharge from a boat, an unlicensed "straight pipe," or "grandfathered."

Commercial and residential discharges of sanitary waste have been regulated since the late 1970's when direct discharges of untreated waste were banned (except in very specific situations). At that time, many old "straight pipes" were connected to publicly-owned treatment works (POTWs), replaced with standard septic systems or, in the case of facilities unable to install a septic system because of site conditions, overboard discharge treatment systems (OBDs). There are about 1980 licensed residential or commercial OBDs throughout the State including individual residences, schools, restaurants, apartment buildings, motels, inns, private community sewage treatment facilities, and hospitals.

In 1987, due to concern over the closure of shellfish areas because of OBDs, the legislature revised the waste discharge law to significantly restrict the use and licensing of OBDs. New OBDs are now prohibited, but those facilities with existing, approved, treatment systems are allowed to continue discharging until the DEP orders the systems removed. The DEP will not order a system removed if there is no viable alternative to the discharge. Most OBDs are also prohibited from increasing the licensed flow from their treatment system and some cannot discharge on a year-round basis.

The main thing to remember is that an unapproved, untreated, discharge of waste water is NOT an OBD. In addition, **unlicensed "straight pipes" are NOT "grandfathered;" they are illegal and must be replaced by approved subsurface or overboard discharge systems or connected to a POTW**. Unlicensed, untreated discharges threaten public health and cause poor water quality.

When an illegal discharge is discovered, the DEP works with the homeowner or business-owner to find a legal and affordable treatment system. The DEP requires that all alternatives to an OBD are carefully evaluated, but if no alternative exists, a new OBD system may be licensed. Undeveloped lots are not eligible for an OBD; only facililities with a discharge that has been in existence.

If you know of any "straight pipes" please report them to the DEP. It is not fair that you have to comply with the laws and bear those expenses when others are not doing the same. The DEP is available to discuss the options for waste water disposal. **Please call us!** ♦

Topics Covered in this Issue

Honey, I Changed the Fee System!

Important Information on Changes to the License Fee System By Pam Parker

In the last issue of the newsletter, I discussed inspection fees ("Bills, Bills, Bills"), their purpose and implementation. You will be happy to hear that the DEP has made no changes to the inspection fee system. During the past year however, the DEP has made some significant changes to the license fee system.

Prior to July 1998, the DEP required payment of license fees with the submission of a license application every five years. Those fees could be very high depending on the type of facility being licensed. For instance, an average residential five-year renewal fee was $187.50. A commercial license for the same license volume could be over $1,840. The fee system was based on the type of discharge and the discharge volume, but there were huge disparities between types of discharges that were not justified.

Additionally, because the license fees were tied to the application process, license fee collection was sporadic, and many licensees were not paying at all. Many licensees were not prepared to pay the large 5-year fee when they needed to renew their license, putting them in an awkward position. The DEP wanted to make license fee collection annual to break the fees into more manageable amount for the licensees, to ensure that all licensees were paying their fair share, and to even out the revenue stream for the DEP.

For a number of years, the DEP had tried to change the OBD fee system to make it more equitable. In 1998, the DEP succeeded in changing all waste discharge fees as part of a larger legislative package, finally enabling us to charge license fees annually and lowering the high commercial license fees. The resulting fee system eliminates the huge differences between license types, implements a discharge volume charge, and allows the DEP to charge the license fee annually rather than charging with the submission of an application.

All license and permit holders will be charged an annual fee consisting of a base fee, determined by their license type, and a charge based on discharge volume. The different base fees reflect the slight differences in oversight effort required by the facilities. The discharge volume charge has two purposes. It allocates a larger fee to larger discharge volumes to compensate for the higher DEP oversight required, and it encourages licensees to monitor and potentially reduce their license volume. There are five different fee categories for OBDs. The categories and their fee formulas are described below.

For Example... Mr. Smith owns a cottage in Boothbay and his property (a private residence) is licensed for a discharge of 500 gpd. He last renewed his licensed in 1996 and paid $187.50 when he submitted his application.

Mr. Smith's annual license fee is as follows:

$45 (base fee)
+$10 ($0.2 x licensed flow of 500 gpd)
$55 annual license fee for Mr. Smith

And, because he last renewed in 1996, Mr. Smith will be credited for license fees through the year 2000.

Mr. Smith's treatment system is a mechanical treatment plant so he is required to have a service contractor. He qualifies for the contractor waiver and pays only $30 per year for his inspection fee. Mr. Smith's fees for the next few years will be as follows:

Year	1999	2000	2001	2002
License	$0	$0	$55	$55
Inspection	$30	$30	$30	$30
Total Fee	**$30**	**$30**	**$85**	**$85**

✓**5A Residential up to and including 600 gpd**
$45 + ($.02 x licensed flow)

✓**5B Residential over 600 gpd**
$60 + ($.02 x licensed flow), cap $600

✓**5C Commercial**
$60 + ($.02 x licensed flow), cap $1200

✓**5D Publicly Owned up to 6000 gpd**
$60 + ($.02 x licensed flow) cap $180

✓**5E Publicly Owned over 6000 gpd**
$175 + ($.50/1000 gpd licensed flow)

Starting in February 1999, all licensees will receive an annual bill including both a license fee and an inspection fee. For clarity, the fees will be listed separately. Owners who have renewed their licenses since January 1, 1995 will receive credit for 4 years from the year of issuance. The license fee line on their annual bill will show a fee of $0. However, payment of the inspection fee will still be required in most cases. A few owners will receive a bill with no inspection fee required, but they will be required to pay a license fee. Unlike previous years, owners will be billed a certain amount for your inspection fee. **Just like previous years, this amount may be adjusted by the licensee subject to the schedule detailed in the cover letter with the bill.** Payment of both the license and inspection fees is required within 30 days of receipt of the bill. Failure to pay the fees can result in termination of the license, making any discharge illegal.

When it is time to renew the license, no fees will be due with the application providing that all fees have been paid to date. Applications to transfer a current license will still cost $100. The DEP hopes that the changes to the fee system will make paying the required fees easier for the licensee. If you have further questions about the new fee system, please contact Jeff Canwell, Mary Morgan, or Pam Parker. ♦

"What do you mean my license has expired?" by Mary Morgan

Many licensees are surprised when we notify them that their license is expired because they confuse the annual inspection fee with a "license" fee. These fees historically have been administered separately, but, starting in January 1999, they will be billed together. There is no longer a fee with applications, except for transfers. (See article on Page 2 about the new fee system).

I will briefly explain the OBD licensing history and purpose to you.

The DEP has registered, certified, licensed, or permitted wastewater discharges since 1974, to comply with the Clean Water Act of 1974. The DEP required most discharges to first register, then install treatment and be licensed. At that time, the licensing process required that the discharge meet "Best Practicable Treatment" (BPT) criteria and improve water quality. The licensing requirements have changed little during the past 25 years, but the requirements for **BPT** and the **water quality** of the receiving waterbodies have changed significantly.

In order to be granted an overboard waste discharge license by the DEP, the applicant must demonstrate that their treatment system meets BPT, and their discharge does not impact the quality of the receiving waterbody.

For OBDs, BPT is one of the following treatment systems, in decreasing order of preference:

1. No overboard discharge, meaning installation of a subsurface disposal system; connection to a POTW, or for seasonal residences only, installation of a holding tank.
2. A sandfilter treatment system followed by disinfection.
3. A mechanical treatment plant followed by disinfection, for situations where a sandfilter cannot be installed, or there is a lot of oil or grease from cooking food.

So, in order to meet the BPT criteria, the applicant must demonstrate that they have installed the best system for their property. Fortunately, the requirements for installing subsurface disposal systems are more lenient when you are replacing an OBD system. Homeowners who were unable to install a subsurface system in 1976 often find that they can now, due to more lenient site requirements or changes in disposal technology. The result of those changes is that if you haven't had a site evaluation within the past 2 years, it is very difficult to meet the BPT criteria. If you have a recent site evaluation that demonstrates you cannot install a subsurface system, you will meet the BPT finding. Because we don't want to spend your money on unnecessary site evaluations, we do not require them with most renewal applications. Remember that failing to meet BPT only means you will be issued a conditional permit. You will still be allowed to discharge! We'll talk more about conditional permits later.

The second required finding relates to the impact of your discharge on water quality. If you discharge negatively impacts the waterbody in any way, you will be issued a conditional permit.

How can your discharge impact the waterbody, you ask?

Discharges to most of the coastal waters of the state are into potential shellfish harvesting areas. Anytime there is a discharge pipe into a shellfish area, a portion of that area must be closed to harvesting due to the threat of contamination from the discharge. The National Shellfish Sanitation Program implemented by the Department of Marine Resources (DMR) dictates the closures. DMR's job is to make sure that the shellfish harvested in Maine are safe to eat, so they are naturally conservative. You probably maintain your system very well, but

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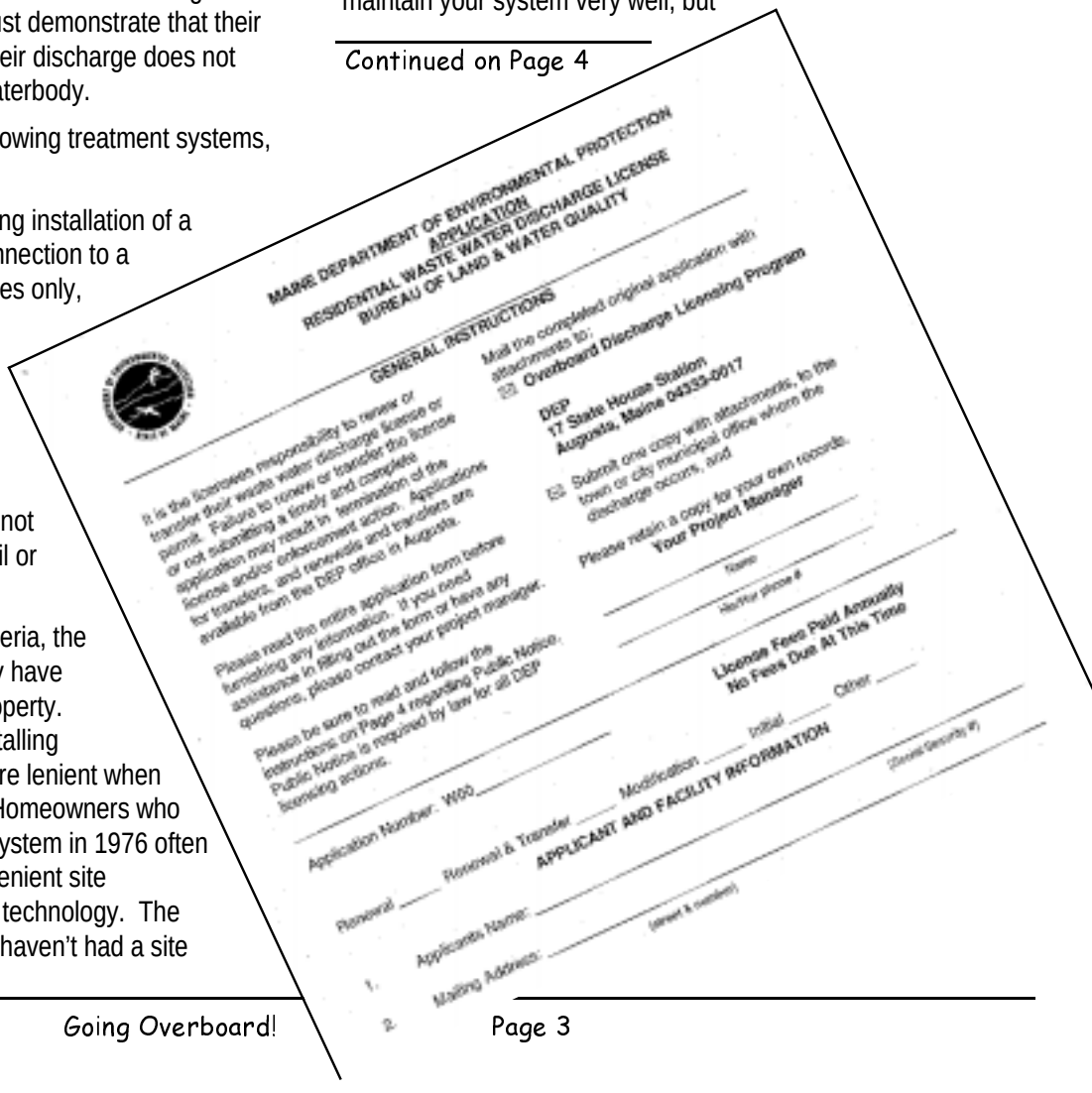
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
APPLICATION
RESIDENTIAL WASTE WATER DISCHARGE LICENSE
BUREAU OF LAND & WATER QUALITY

GENERAL INSTRUCTIONS

It is the licensee's responsibility to renew or transfer their waste water discharge license or permit. Failure to renew or transfer the license or not submitting a timely and complete application may result in termination of the license and/or enforcement action. Applications for transfers, and renewals and transfers are available from the DEP office in Augusta.

Please read the entire application form before furnishing any information. If you need assistance in filling out the form or have any questions, please contact your project manager.

Please be sure to read and follow the instructions on Page 4 regarding Public Notice. Public Notice is required by law for all DEP licensing actions.

Mail the completed original application with attachments to:
☒ Overboard Discharge Licensing Program
DEP
17 State House Station
Augusta, Maine 04333-0017

☒ Submit one copy with attachments, to the town or city municipal office where the discharge occurs, and

Please retain a copy for your own records.
Your Project Manager

Name
Name phone #

Application Number: W00_____

Renewal ____ Renewal & Transfer ____ Modification ____ Initial ____ Other ____

License Fees Paid Annually
No Fees Due At This Time

APPLICANT AND FACILITY INFORMATION

1. Applicants Name: _____ (Social Security #)
2. Mailing Address: _____ (street & number)

"What do you mean my license has expired?"
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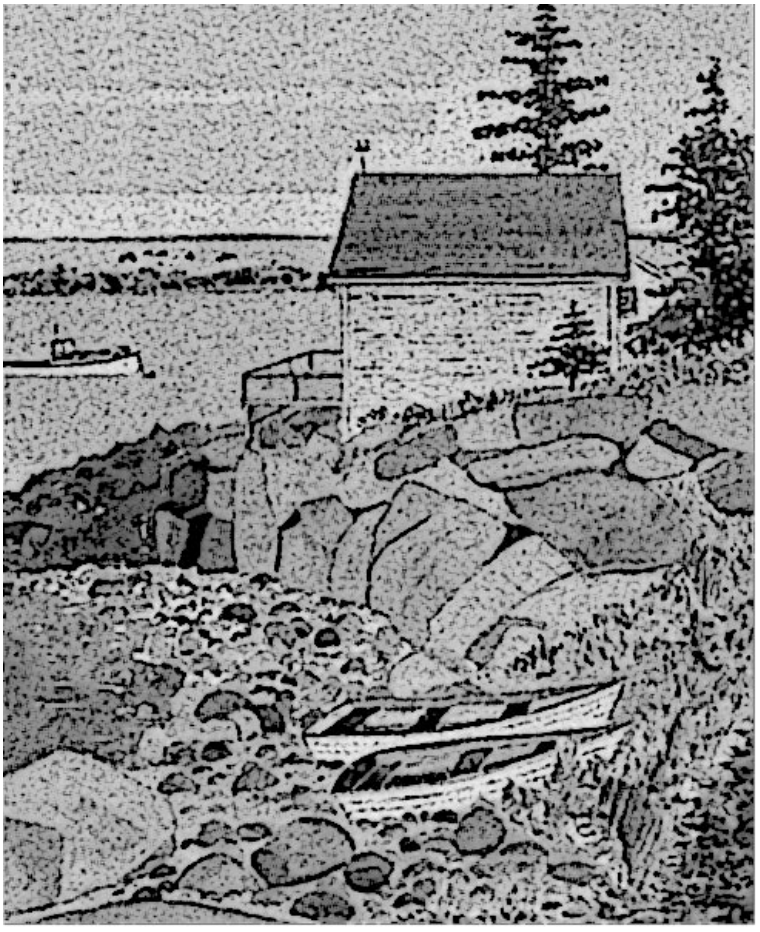
there is always the potential that pathogens will be released from your discharge, contaminating shellfish in the area.

But, if you live on the bold, rocky shoreline, where the poor rockweed can't hold on let alone grow a mussel, you think there can't be any shellfish. However, since only the highest energy areas (Pemaquid Point and Cape Newagen, for example) are considered non-shellfish habitat, most of the coast has some shellfish resource. Shellfish harvesting is a designated use of all coastal water of the state, and prohibiting a designated use by discharging waste water prevents the water-body from meeting its classification. Any discharge that prevents the water-body from meeting its classification must receive a conditional permit. Discharges into inland waters (streams and rivers) that are not meeting their water quality for reasons that are attributable to the OBD will also receive a conditional permit. The DEP issues a conditional permit when a discharge fails to meet BPT or water quality criteria. The conditional permit is functionally similar to a license, but contains a provision for the permit to expire six months after the DEP offers grant money to the owner for the costs of replacing the OBD.



The other two issues that have to be addressed are whether the **existing treatment system is adequate** and whether the **use** of the system has changed since 1987 (when the laws restricted OBDs significantly). Let's talk about these issues.

For each OBD facility, the DEP staff have to determine whether the existing treatment system is adequate for the volume of the discharge. We use the inspection records, information you provide, and flow estimates from the Plumbing Code to determine estimated use and capacity of each system. If the size of the system is adequate for the wastewater used, we do not require any changes. If it is not, we have to do some more investigation, and you may be required to either reduce water use or install additional treatment capacity.

Usually, if we find that a system is too small for the discharge, it is because the use of the facility has expanded since the system was installed. Expansions of OBDs after 1987 are prohibited, as are changes from seasonal to year-round use. This provision of the law is often the most troublesome for homeowners who want to change their house to year-round or increase the number of bedrooms in the house. If you have expanded the use of your facility or the volume of the discharge without DEP approval, we will work with you to determine the limits of your discharge.

So, let's pull this all together. The licensing process requires the DEP staff to look at the information you provide in the application, information from our own files, and all these requirements to make findings that are credible and legal, thought not always popular. Licenses were supposed to be renewed on a 5-year cycle. However, due to staffing changes and budget cuts, the DEP fell behind on re-licensing and there are many licenses that have been expired for some time. We have been methodically reducing the number of expired licenses by working on the oldest and transfers first. So, if you find that your license has expired, DON'T PANIC. You are still authorized to have an OBD. DEP staff will be contacting you to renew your license according to our schedule.

However, if you are planning to sell your property, we do suggest that you renew your license prior to listing the property in order to get all of the issues mentioned above clarified and up-to-date. A current license will make you, your realtor, your lawyer, and the prospective buyer much more comfortable.

If you have any questions about re-licensing, the requirements, the law, or selling your property please contact Mary Morgan or Pam Parker. ♦

Coastal Water Quality 101

By John Sowles

Although the topic of overboard discharges may be the focus of this newsletter, the DEP thought that it might be useful to broaden out and discuss other work that relates to coastal water quality. Over the last ten years, the Department of Environmental Protection has gathered data on the types and levels of pollution along Maine's coast. While the cleanup of human sewage is a success story with thousands of acres of shellfish flats reopened, national concerns about toxic contaminants like heavy metals, pesticides, and other chemicals prompted a look here in Maine.

Toxic chemicals are everywhere and many are even part of nature. Detecting them was never in question. However, knowing what level of chemical either causes harm or is not natural becomes a more meaningful objective. We have been doing this by looking at levels of toxic contaminants (e.g., mercury, lead, cadmium, PCBs, pesticides, petroleum hydrocarbons, and dioxins) in various marine animal tissues. The common blue mussel is used to measure chemicals available from the water. Tomalley of lobster is used to measure availability of contaminants from bottom sediments. Blood from young cormorants helps us understand the extent these chemicals travel in the marine food chain. By knowing natural background levels, we can focus our cleanup and prevention on areas that have elevated levels of contamination rather than trying to "correct" nature.

Since the 1970s, society as a whole has invested huge sums of money to clean up wastewater from towns and factories. The improvement in water quality today (compared to what it was back in the '60s) is obvious to anyone who was "fortunate" enough to witness and smell conditions back then. Where we appear to fall short, however, is at the individual citizen level. The recent example of groundwater contaminated by MTBE demonstrated that individual actions can be as "effective" in a negative sense as actions by large institutions. Most cases of well contamination were a result of small backyard spills, not gas stations. Another example of cumulative individual impact, as opposed to the "big guy", is the case of environmental lead. Since the 1980s and the removal of leaded motor fuels from the market, we have seen a real decline in levels of environmental lead.

By now, I hope, we all know better than to throw chemicals down sink drains, ditches, storm drains, or into streams, lakes or the ocean. Less appreciated, perhaps, is the cumulative effect of many individuals using the pesticides, antifouling paints, solvents, engine fuels, fertilizers and cleaning agents that are common in modern society. We must be more careful about how these chemicals are handled not just on the water but on land as well. Even when we follow the manufacturers instructions, these materials often end up in the ocean anyway.

On land, lawn and garden chemicals (fertilizers, insecticides and herbicides) are easy to purchase and apply. Our lawns frequently go right to the shore. Applications coincide with the seasons when heavy rain (thundershowers, spring and fall rains) can wash these materials into the ocean. Samples taken adjacent to urban-residential areas (not just agricultural) contain the highest levels of these toxic chemicals.

On water, boating appears to be responsible for other compounds such as the active ingredient of antifouling paints (by design toxic), hydrocarbons from oily bilge water and outboard motors, and even fiberglass solvents that are carelessly tossed into the water. Marinas, anchorages, and boatyards have the highest levels of these contaminants.

A little farther afield, smoke from wood stoves, oil furnaces, automobiles, and backyard incinerators are a significant source of toxic chemicals such as mercury, cadmium, dioxins and hydrocarbons. Not only do particulates of combustion settle directly on the water, they also settle on paved surfaces and roof tops to be washed into the nearest stream or waterbody each time it rains.

Although we have found to date that the coast of Maine remains relatively free of elevated levels of contamination, there are real reasons for continuing concern. Perhaps the most difficult challenge ahead is curbing the cumulative impact of our individual behavior. Currently, the DEP Non-Point Source Program is working with contractors, boatyards, and homeowner associations by providing educational material and technical assistance to reduce the above mentioned impacts.

In this short article, I have tried to point out that we, as individuals, can and do affect our coastal water quality. The subject is far too broad to cover it thoroughly in one article. For more information on non-point source technical assistance programs, check out our web site at ***http://www.state.me.us/dep/blwq/training/nps.htm*** or call Bill LaFlamme at 287-7726. Beginning February, monitoring results from our testing program will be available on the internet at ***http://www.state.me.us/dep/blwq/monitoring.htm*** ♦

OBD System Maintenance Tips

Sandfilters

- Pump septic system every 3-5 years.
- Mow filter bed at least once per year.
- Keep chlorinator cover and sampling port accessible
- If you notice wet or black spots on or near the sandfilter bed, notify the DEP.

Mechanical Systems (Jet, Chromoglass, Nyadic)

- You must contract with a licensed service contractor to maintain your system. If you do not have a service contract, or hold a service license yourself, you are in violation of your license.

In general

- Put only 2-3 chlorine tablets or 1 large stick in ONE TUBE of your chlorinator. Moisture causes the unused chlorine to swell, clump and generally become useless.
- Check the chlorine level at least once a month.
- If any part of the system other than the septic tank smells septic (rotten egg) or like sewage, your treatment system is not operating properly. Contact your service contractor or the DEP as soon as possible.

Some helpful Reminders

- Chlorine sticks or tablets (hockey puck size) are available at most stores that stock pool supplies (local hardware stores, Wal-Mart etc.).
- If you sell your property, you must disclose to prospective buyers the fact your house has an approved overboard discharge. There may be restrictions in your license or permit that could significantly affect the use of your house. DEP staff are always available to provide information to prospective buyers, and give them the reassurances that they, and their lender, often need. You also need to notify us when the property is sold so we may get a transfer application out to the new owner. Otherwise, you will continue to get bills and be held responsible for the OBD.
- Your treatment system is designed to treat a certain volume of waste per day. If you overload it, the waste water will not be treated adequately and you will be in violation of your license. Call us if you have questions about water conservation.

More Information

If you have questions or want further information on any of the topics covered in this newsletter, please contact the author of the article or the person listed below.

✓Questions about **inspections fees, inspections, treatment system maintenance, and service contractors**, please contact: Jeff Canwell (207)287-7684 or e-mail him at jeff.canwell@state.me.us

✓Questions about **license requirements, license fees, new licenses or license renewals and transfers**, please contact: Mary Morgan (207)287-7781 or e-mail her mary.morgan@state.me.us OR Pam Parker (207)287-7905 or e-mail her at pam.d.parker@state.me.us

✓Questions **about removing your overboard discharge and grant money** should be directed to: David Achorn (207) 287-7766 or e-mail him at Dave.p.achorn@state.me.us

✓**If you would like to report an illegal discharge or other water quality questions, please call (207)287-3901 and ask for the water quality person on-call.**

We hope this newsletter has been informative and interesting. Please send us your comments, questions to be addressed in the newsletter, or other suggestions to the address below. Visit the DEP web page at **http://www.state.me.us/dep/** for informative and interesting stuff about Maine's environment and the work of the DEP.

Questions, Comments, Suggestions?
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